Course Syllabus

Code - Course Title	**BYK503 - Metabolism I**
Course Type	I. SEMESTER
Laboratory + Practice	3+0
ECTS	**6.0**
Language of Instruction	Türkçe
Course Type	Required Courses
Course Instructor(s)	PROF. DR. ŞÜKRÜ BEYDEMİR

Mode of Delivery	Face to face
Prerequisites	There is no prerequisite or co-requisite for this course.
Courses Recomended	Biochemistry
Work Placement	Not Applicable

Course Syllabus

Weeks	Learning Outcomes	Topics	Teaching Methods
Week - 1		General properties of metabolism	
Week - 2		Carbon and nitrogen cycle	
Week - 3		Bioenergetics and ATP	
Week - 4		Catabolism and anabolism	
Week - 5		Hydrogen and electron transporters in metabolism	
Week - 6		Pyruvate formation and products, the role of 2,3-bisphospho glycerate in oxygen transport	
Week - 7		TCA cycle	
Week - 8		Oxidative phosphorylation	
Week - 9		Elimination of damage caused by reduction of oxygen	
Week - 10		Hexosemonophosphate pathway, control of glucose 6-phosphate in the cell	
Week - 11		Gluconeogenesis and photosynthesis reactions	
Week - 12		Glycogen destruction and construction	
Week - 13		Metabolic coordination	
Week - 14		Metabolic coordination	

Learning Outcomes

#	Learning Outcome
1	Explains the definition and properties of metabolism
2	Explain the functions of some important elements and molecules for metabolism
3	Explains glucose formation and fate
4	Explain the respiratory in metabolism
5	Explains the mechanism of formation of five-carbon sugars and NADP in metabolism
6	Explains glycogen metabolism and metabolic communication

Sustainable Development Goals

No content has been provided.

Course Theme

No content has been provided.

AKTS Workload

Activity	Duration (Hour)	Count	Workload
Teorik Derse Katılım	0	0	0
Sınıf Dışı Çalışma (Ön Hazırlık & Pekiştirme Amaçlı)	0	0	0
Ödevler	0	0	0
Proje - Rapor - Sunum Hazırlama	0	0	0
Ara Sınav Hazırlığı (sınav süresi dahil)	0	0	0
Final Sınavı Hazırlığı (sınav süresi dahil)	0	0	0
Uygulama (Laboratuvar, Müzik/Enstrüman Uygulaması, Atölye/Saha Çalışması vb.)	0	0	0
Staj Uygulaması	0	0	0
		Calculated ECTS	**0**

Assessment Method and Passing Requirements

No content has been provided.

Assessment Method and Passing Requirements	Quamtity	Percentage (%)
1.Midterm Exam	1	40
Final Exam	1	60
	Sum (%)	**100**